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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/822,499	04/12/2004	Christopher C. McConnell	MSFT-3513/302456.01	3038

23377 7590 04/15/2008

WOODCOCK WASHBURN LLP
CIRA CENTRE, 12TH FLOOR
2929 ARCH STREET
PHILADELPHIA, PA 19104-2891

EXAMINER	
KHOSHNOODI, FARIBORZ	

ART UNIT	PAPER NUMBER
2164	

MAIL DATE	DELIVERY MODE
04/15/2008	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/822,499	MCCONNELL, CHRISTOPHER C.	
	Examiner	Art Unit	
	FARIBORZ KHOSHNOODI	2164	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *09 January 2008*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-26* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-26* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *12 April 2004* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

Detailed Action

Response to amendment

1. Applicant's arguments/amendments with respect to pending claims 1-26 filed on January 9, 2008 have been fully considered but they are not persuasive. The Examiner would like to point out that this action is made final (See MPEP 706.07a).

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

3. Claims 1-6, 9-16, and 19-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Calcagno et al. United States Patent Publication No. 2003/0176,999 A1 in view of Newsted et al. United States Patent No. 6,016,467 further in view of Bolotinikov et al. United States Patent Publication No. 2003/0009352 A1.

As per claims 1 and 9:

Calcagno et al. teach a system/method comprising: **a program module executing on a computer that receives inputs** (i.e., "The invention may be described in the general context of computer-executable instructions, such as

program modules, being executed by a computer. " (Par. 32)… "First, the normalization component (wherever it may reside) receives the input DRS (i.e., the array of boxes)."(Par. 207)) **a program module configured to generate from the modified inputs, a collection of ranked interpretations, comprising a set of fragments of data types structurally compatible to data types in the modified inputs, wherein a fragment of the set of compatible fragments is generated by analyzing a grammatical structure of one or more of the modified inputs at a linguistic level** (i.e., "Next, UDRS semantic mapping processing engine 222 in IFG 212 applies all applicable semantic mapping rules to the UDRS. This is indicated by block 324. It should be noted that these rules can be constructed at compile time or constructed from other rules and the schema at run time. The result of the application of the semantic mapping rules is a set of interpretation fragments that specify a mapping between a set of UDRS box elements and a set of SemDRS box elements. The token coverage of these interpretation fragments are defined as the set of tokens in the input sentence corresponding to the UDRS box element matched. The interpretation fragments with their token coverage and assigned costs are sent to data store 215 and stored. This is indicated by block 326 in FIG. 4. It should also be noted, of course, that multiple rules can be applied to the same part of the UDRS."(Par. 251)).

Calcagno et al. do not explicitly disclose for the inputs to identify a token. However, Newsted et al. teaches a method/system, **a program module configured to parse a grammatical structure of the received inputs to identify a token not present in the received inputs, wherein the token includes a word that is statistically associated with documents that have grammatical structures similar to the received inputs** (i.e., "As known to those skilled in art, lexical analysis typically includes detecting language tokens which are typically basic elements of a language, such as valid keywords. Syntactic analysis includes using parsing techniques typically known to those skilled in the art to verify the relationship between various lexical tokens detected during the lexical analysis phase. In other words, the lexical analysis phase checks to see that the basic atomic elements, such as keywords of a language, are proper. The syntactic analysis phase builds upon these valid atomic elements or lexical tokens by further verifying that these tokens are organized in relation to one another, for example, in accordance with rules defining valid programming language statements." (See Newsted et al. Col. 5 lines 1-13)) **; program module configured to add the token to the received inputs thereby generating a modified inputs** (i.e., "Additionally, a modification is made to the generated lexical analyzer code 84 as produced by LEX, the lexical analyzer generator 82 in the embodiment. In this embodiment, LEX

includes a module named "lexget.c " which includes code that reads in the input character stream. The lexical analyzer generator 82 typically generates code in which the character input stream is read from a file. In this embodiment of the grammar sensitive editor, "lexget.c" is modified to read the input characters from the edit buffer 42, rather than from an input file." (See Newsted et al. Col. 13 lines 36-45)).

Therefore, it would have been obvious to a person in the art at the time the invention was made to modify the method/system disclosed in Calcagno et al. to have inputs to identify a token. This modification would have been obvious because a person having ordinary skill in the art, at the time the invention was made, having the teachings of Calcagno et al. and Newsted et al. before him/her, to modify the system of Calcagno et al. to include the inputs to identify a token of Newsted et al., since it is suggested by Newsted et al. such that, based on erroneous token detection the transmission valid language would be secure (i.e., "As a result of lexical processing, user input is typically represented as tokens. A syntax error generally involves incorrect placement or omission of one lexical token in relation to another lexical token, such as a missing semicolon (";") in a programming language statement." (See Newsted et al. Col. 2 lines 13-17)… "Upon detection of an erroneous token in the user input, one or more valid language options are transmitted for use in place of the erroneous token. If no erroneous tokens are detected, one

or more subsequent valid language options are transmitted."(See Newsted et al. Col. 2 lines 43-47)).

Combination of Calcagno et al. and Newsted et al. do not explicitly disclose for the ranked interpretation. However, Bolotinikov et al. teaches a method/system, **performing an action in response to at least one of the plurality of ranked interpretations** (i.e., "In such instances, the score of the candidate providing the new interpretation will be adjusted to properly reflect the newly-ranked interpretation."(See Bolotinikov et al. Par. 130)).

Therefore, it would have been obvious to a person in the art at the time the invention was made to modify the method/system disclosed in combination of Calcagno et al. and Newsted et al. to have ranked interpretation. This modification would have been obvious because a person having ordinary skill in the art, at the time the invention was made, having the teachings of combination of Calcagno et al. and Newsted et al. and Bolotinikov et al. before him/her, to modify the system of combination of Calcagno et al. and Newsted et al. to include the ranked interpretation of Bolotinikov et al., since it is suggested by Bolotinikov et al. such that, it provides consistent means for comparison and ranking and it makes it easy for user to recognize multiple forms on interpretation (i.e., "Such a system, as achieved by applicant, is preferred, since it incorporates the ability to recognize multiple forms of interpretation, while providing a consistent means for comparison and ranking." (See Bolotinikov et al. Par. 130)).

As per claim 2:

Calcagno et al. as modified teach a system/method, **wherein the inputs comprise a natural language request** (i.e., "Many applications would benefit from a natural language interface suitable to accept and accurately process natural language inputs from a user." (See Calcagno et al. Par. 2)).

As per claims 3 and 12:

Calcagno et al. as modified teach a system/method, **wherein the inputs comprise a filter** (i.e., "Even assuming that a natural language expression can be subjected to natural language processing and that a linguistic structure can be developed which represents the meaning of the natural language input, major hurdles must be overcome in order to use that linguistic structure with applications that expect inputs having a specific structure." (See Calcagno et al. Par. 5). With explanations of the input having a specific structure requires the input to have some kind of filtering system).

As per claims 4 and 13:

Calcagno et al. as modified teach a system/method, **wherein the inputs comprise a bias** (i.e., "Based on the interpretation fragments, SIC 210 generates patterns and initial search states at ISS creation component

218. The initial search states correspond to partially complete SemDRS structures with the logical and box structure removed. The initial search states, along with preferences for how to assemble the interpretation fragments (or patterns) embodied in the initial search states are provided to IA 214." (See Calcagno et al. Par. 241))

As per claims 5 and 14:

Calcagno et al. as modified teach a system/method, **wherein the inputs comprise a culture** (i.e., "Many applications would benefit from a natural language interface suitable to accept and accurately process natural language inputs from a user. Such natural language systems must be robust with respect to linguistic and conceptual variation. Consequently, they must be easy to use." (See Calcagno et al. Par. 2))

As per claim 6:

Calcagno et al. as modified teach a system/method, **wherein the inputs comprise a schema for data to be operated upon** (i.e., "The semantic analysis system can perform this conversion by comparing the input linguistic structure to an application schema such that the SemDRS accurately represents the domain-dependent meaning of the

linguistic expression, but has a structure that can readily be used by a desired application."(See Calcagno et al. Par. 8)).

As per claims 10 and 23:

Calcagno et al. as modified teach a system/method, **wherein the action comprises performing a search** (i.e., "SIC 210 includes a service invoker 216, an initial search state (ISS) generation component 218, a DRS structure restoration generator 220, and a data store 215 that contains all interpretation fragments and related information created by IFG 212."(See Calcagno et al. Par. 28)).

As per claims 11 and 24:

Calcagno et al. as modified teach a system/method, **wherein the action comprises executing a command represented by the at least one of the plurality of ranked interpretations** (i.e., "New interpretations provided by translation candidates undergoing testing are recorded, evaluated and added to the scoring dictionary with the relative point value deemed appropriate under applicant's system. In such instances, the score of the candidate providing the new interpretation will be adjusted to properly reflect the newly-ranked interpretation."(See Bolotinikov et al. Par. 130)).

As per claim 15:

Calcagno et al. as modified teach a system/method, **wherein the at least one input comprises a schema for data upon which the action will be taken** (i.e., "The application schema is a model of the application's capabilities and behavior according to an entity-and-relation model, with associated type hierarchy."(See Calcagno et al. Par. 46)).

As per claim 16:

Calcagno et al. as modified teach a system/method comprises: **analyzing the natural language request to determine a plurality of relevant terms** (i.e., "In system 200, a textual string 206 is input to linguistic analysis component 202. String 206 is illustratively an utterance, or any other type of natural language input which has been converted to text. Linguistic analysis component 202 analyzes input string 206 to produce a parse which includes, in one illustrative embodiment, a UDRS, a syntax parse tree, a logical form, a tokenized string, and a set of named entities."(See Calcagno et al. Par. 42)); **associating each of the plurality of relevant terms with at least one structure of a plurality of structures in a schema associated with data upon which the action will be taken** (i.e., "The job of the semantic analysis component 204 of the present invention is to receive the parse (which includes the UDRS box structure shown in FIG. 5) and interpret it precisely

in terms of the application schema 300 shown in FIG. 6. This interpretation can then be passed to the application where it will be readily understood. In order to do this, semantic analysis component 204 first applies semantic mapping rules to the UDRS."(See Calcagno et al. Par. 227)); **combining terms associated with the at least one structure to generate at least one interpretation of the plurality of interpretations** (i.e., "FIG. 3 is a block diagram illustrating semantic analysis component 204 in greater detail. FIG. 3 shows that semantic analysis component 204 illustratively includes semantic interpretation controller (SIC) 210, interpretation fragment generator (IFG) 212, and interpretation assembler (IA) 214. SIC 210 includes a service invoker 216, an initial search state (ISS) generation component 218, a DRS structure restoration generator 220, and a data store 215 that contains all interpretation fragments and related information created by IFG 212."(See Calcagno et al. Par. 48)); **and assigning a rank to the at least one interpretation** (i.e., "In such instances, the score of the candidate providing the new interpretation will be adjusted to properly reflect the newly-ranked interpretation." (See Bolotinikov et al. Par. 130)).

As per claim 19:

Calcagno et al. as modified teach a system/method, **further comprising receiving a set of parameters** (i.e., "The information received by SIC 210 is all made available to IFG 212 and the semantic mapping and application schema, along with the data in data store 215 is made available to IA 214."(See Calcagno et al. Par. 240)).

As per claim 20:

Calcagno et al. as modified teach a system/method, **wherein the set of parameters comprises an expansion policy** (i.e., "One method which can be used in relating the UDRS inputs to SemDRS outputs is to first apply semantic mapping rules to the elements of the UDRS in order to obtain SemDRS fragments, and then in order to enhance robustness of the system to apply similar rewrite rules at the string level to create additional SemDRS fragments for information not previously associated with applicable semantic mapping rules."(See Calcagno et al. Par. 11). With explanation of rule in interpreted as policy).

As per claim 21:

Calcagno et al. as modified teach a system/method, **wherein the set of parameters comprises an interpretation generation policy** (i.e., "The result of the application of the semantic mapping rules is a set of

interpretation fragments that specify a mapping between a set of UDRS box elements and a set of SemDRS box elements." (See Calcagno et al. Par. 251)).

As per claim 22:

Calcagno et al. teach a method comprising **computer-executable instructions for: in response to receiving a natural language request**, (i.e., "Many applications would benefit from a natural language interface suitable to accept and accurately process natural language inputs from a user. Such natural language systems must be robust with respect to linguistic and conceptual variation. Consequently, they must be easy to use."(See Calcagno et al. Par. 2)); **analyzing the modified natural language request by analyzing a grammatical structure of the modified natural language request at a linguistic level to determine a plurality of relevant terms** (i.e., "For example, natural language systems must be able to accommodate modifier attachment ambiguities, quantifier scope ambiguities, conjunction and disjunction ambiguities, nominal compound ambiguities, anaphora, elliptical sentences, etc."(See Calcagno et al. Par. 3)… "In system 200, a textual string 206 is input to linguistic analysis component 202. String 206 is illustratively an utterance, or any other type of natural language input which has been converted to text. Linguistic

analysis component 202 analyzes input string 206 to produce a parse which includes, in one illustrative embodiment, a UDRS, a syntax parse tree, a logical form, a tokenized string, and a set of named entities."(See Calcagno et al. Par. 42)); **associating each of the plurality of relevant terms with a structure in a schema associated with data upon which an action will be taken such that the data is structurally compatible to data in the modified natural language request** (i.e., "The job of the semantic analysis component 204 of the present invention is to receive the parse (which includes the UDRS box structure shown in FIG. 5) and interpret it precisely in terms of the application schema 300 shown in FIG. 6. This nterpretation can then be passed to the application where it will be readily understood. In order to do this, semantic analysis component 204 first applies semantic mapping rules to the UDRS."(See Calcagno et al. Par. 227)); **combining terms associated with the structure to generate at least one interpretation of the natural language request based on matching words and comparing grammatical structures** (i.e., "The semantic analysis system can perform this conversion by comparing the input linguistic structure to an application schema such that the SemDRS accurately represents the domain-dependent meaning of the linguistic expression, but has a structure that can readily be used by a desired application." (See Calcagno et al. Par. 8)… "FIG. 3 is a block diagram

illustrating semantic analysis component 204 in greater detail. FIG. 3 shows that semantic analysis component 204 illustratively includes semantic interpretation controller (SIC) 210, interpretation fragment generator (IFG) 212, and interpretation assembler (IA) 214. SIC 210 includes a service invoker 216, an initial search state (ISS) generation component 218, a DRS structure restoration generator 220, and a data store 215 that contains all interpretation fragments and related information created by IFG 212."(See Calcagno et al. Par. 48)); **and performing an action in response to the at least one interpretation** (i.e., "FIG. 3 is a block diagram illustrating semantic analysis component 204 in greater detail. FIG. 3 shows that semantic analysis component 204 illustratively includes semantic interpretation controller (SIC) 210, interpretation fragment generator (IFG) 212, and interpretation assembler (IA) 214."(See Calcagno et al. Par. 48)).

Calcagno et al. do not explicitly disclose for the token. However, Newsted et al. teaches a method/system, **parsing the grammatical structure of the natural language request to identify a token not present in the natural language request, wherein the token includes a word that is statistically associated with documents that have grammatical structure similar to the natural language request** (i.e., "As known to those skilled in art, lexical analysis typically includes detecting language

tokens which are typically basic elements of a language, such as valid keywords. Syntactic analysis includes using parsing techniques typically known to those skilled in the art to verify the relationship between various lexical tokens detected during the lexical analysis phase. In other words, the lexical analysis phase checks to see that the basic atomic elements, such as keywords of a language, are proper. The syntactic analysis phase builds upon these valid atomic elements or lexical tokens by further verifying that these tokens are organized in relation to one another, for example, in accordance with rules defining valid programming language statements."(See Newsted et al. Col. 5 lines 1-13)); **adding the token to the natural language request thereby generating a modified natural language request** (i.e., "Additionally, a modification is made to the generated lexical analyzer code 84 as produced by LEX, the lexical analyzer generator 82 in the embodiment. In this embodiment, LEX includes a module named "lexget.c " which includes code that reads in the input character stream. The lexical analyzer generator 82 typically generates code in which the character input stream is read from a file. In this embodiment of the grammar sensitive editor, "lexget.c" is modified to read the input characters from the edit buffer 42, rather than from an input file." (See Newsted et al. Col. 13 lines 36-45)).

Therefore, it would have been obvious to a person in the art at the time the invention was made to modify the method/system disclosed in Calcagno et al. to have token. This modification would have been obvious because a person having ordinary skill in the art, at the time the invention was made, having the teachings of Calcagno et al. and Newsted et al. before him/her, to modify the system of Calcagno et al. to include the token of Newsted et al., since it is suggested by Newsted et al. such that, based on erroneous token detection the transmission valid language would be secure (i.e., "As a result of lexical processing, user input is typically represented as tokens. A syntax error generally involves incorrect placement or omission of one lexical token in relation to another lexical token, such as a missing semicolon (";") in a programming language statement." (See Newsted et al. Col. 2 lines 13-17)… "Upon detection of an erroneous token in the user input, one or more valid language options are transmitted for use in place of the erroneous token. If no erroneous tokens are detected, one or more subsequent valid language options are transmitted."(See Newsted et al. Col. 2 lines 43-47)).

Calcagno et al. as modified do not explicitly disclose for the ranked interpretation. However, Bolotinikov et al. teaches a method/system, **assigning a rank to the at least one interpretation** (i.e., "In such instances, the score of the candidate providing the new interpretation will be adjusted to properly

reflect the newly-ranked interpretation." (See Newsted et al. Par. 130)).

Therefore, it would have been obvious to a person in the art at the time the invention was made to modify the method/system disclosed in combination of Calcagno et al. and Newsted et al. to have ranked interpretation. This modification would have been obvious because a person having ordinary skill in the art, at the time the invention was made, having the teachings of combination of Calcagno et al. and Newsted et al. and Bolotinikov et al. before him/her, to modify the system of combination of Calcagno et al. and Newsted et al. to include the ranked interpretation of Bolotinikov et al., since it is suggested by Bolotinikov et al. such that, it provides consistent means for comparison and ranking and it makes it easy for user to recognize multiple forms on interpretation (i.e., "Such a system, as achieved by applicant, is preferred, since it incorporates the ability to recognize multiple forms of interpretation, while providing a consistent means for comparison and ranking." (See Bolotinikov et al. Par. 130)).

4. Claims 7-8, 17-18, and 25-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Calcagno et al. United States Patent Publication No. 2003/0176999 A1 in view of Newsted et al. United States Patent No. 6,016,467 further in view of Bolotinikov et al. United States Patent Publication No. 2003/0009352 A1 further in view of Faybishenko et al. United States Patent No. 6,961,723 B2.

As per claim 7:

Combination of Calcagno et al., Newsted et al., and Bolotinikov et al. do not explicitly disclose for the connecting to a plurality of search providers. However, Faybishenko et al. teaches a method/system, **further comprising a module for connecting to a plurality of search providers** (i.e., "In one embodiment, the registration information may be maintained in a registration repository that may include registration information for a plurality of providers 120. In one embodiment the hub 100 has access to the registration repository." (See Faybishenko et al. Col. 8 lines 31-36)).

Therefore, it would have been obvious to a person in the art at the time the invention was made to modify the method/system disclosed in combination of Calcagno et al., Newsted et al., and Bolotinikov et al. to have connecting to a plurality of search providers. This modification would have been obvious because a person having ordinary skill in the art, at the time the invention was made, having the teachings of combination of Calcagno et al., Newsted et al., Bolotinikov et al. and Faybishenko et al. before him/her, to modify the system of combination of Calcagno et al., Newsted et al., and Bolotinikov et al. to include the connecting to a plurality of search providers of Faybishenko et al., since it is suggested by Faybishenko et al. such that, It would make it easy for other user to have access others customer's work through network (i.e., "The query routing protocol of the distributed information discovery platform may provide scalability. For example, in one embodiment, a distributed information discovery

network may support millions of publishers and consumers performing billions of transactions per day. In some embodiments, sophisticated implementations may take advantage of advanced connection-management features provided by lower-level protocols (e.g. HTTP/1.1)." (See Faybishenko et al. Col. 10 lines 12-19)).

As per claims 8 and 25:

Calcagno et al. as modified teach a system/method, **wherein the module for connecting to the plurality of search providers receives search results from the plurality of search providers** (i.e., "A distributed network search mechanism is described for a consumer coupled to a network to send a search request to and receive a search result from at least one provider coupled to the network in response to its search request. A search request may include a search query. A search result may include a query result."(See Faybishenko et al. Col. 2 lines 20-24)).

As per claim 17:

Combination of Calcagno et al., Newsted et al., and Bolotinikov et al. do not explicitly disclose for the sending information to at least one of a plurality of search providers. However, Faybishenko et al. teaches a method/system, **further comprising sending at least one of the**

plurality of ranked interpretations to at least one of a plurality of search providers (i.e., "In some embodiments the distributed information discovery network may perform some tailoring of the responses to search queries, for example by enabling providers to select the information to send in response to search queries or by ranking the results based on information from any of the providers."(See Faybishenko et al. Col. 9 lines 2-7)).

Therefore, it would have been obvious to a person in the art at the time the invention was made to modify the method/system disclosed in combination of Calcagno et al., Newsted et al., and Bolotinikov et al. to have sending information to at least one of a plurality of search providers. This modification would have been obvious because a person having ordinary skill in the art, at the time the invention was made, having the teachings of combination of Calcagno et al., Newsted et al., Bolotinikov et al. and Faybishenko et al. before him/her, to modify the system of combination of Calcagno et al., Newsted et al., and Bolotinikov et al. to include the sending information to at least one of a plurality of search providers of Faybishenko et al., since it is suggested by Faybishenko et al. such that, It would make it easy for user to access other user's search result over the network (i.e., "In this embodiment, the consumer may include a front end to perform such presentation, e.g. either as a web page or as a client side user interface. In one embodiment, the distributed information discovery network may collate results from providers 120, perform ranking on the

results with respect to the query and present them in HTML, for example."(See Faybishenko et al. Col. 9 lines 9-15)).

As per claim 18:

Calcagno et al. as modified teach a system/method, **further comprising receiving a collection of search results from at least one of a plurality of search providers** (i.e., "Thus, a general application or user (consumer 120) may be able to query a distributed information discovery network and act on the responses as it sees fit. For example a music file sharing application may receive results and sort them according to file size/connection rate. In some embodiments, the links are provided to the information matching the queries"(See Faybishenko et al. Col. 9 lines 15-21)).

As per claim 26:

Combination of Calcagno et al., Newsted et al., and Bolotinikov et al. do not explicitly disclose for the displaying search result. However, Faybishenko et al. teaches a method/system, **comprising further computer-executable instructions for displaying search results** (i.e., "The consumer may receive the query response and optionally display the results as indicated at 314."(See Faybishenko et al. Col. 22 lines 28-30)).

Therefore, it would have been obvious to a person in the art at the time the invention was made to modify the method/system disclosed in combination of Calcagno et al., Newsted et al., and Bolotinikov et al. to have displaying search result. This modification would have been obvious because a person having ordinary skill in the art, at the time the invention was made, having the teachings of combination of Calcagno et al., Newsted et al., Bolotinikov et al. and Faybishenko et al. before him/her, to modify the system of combination of Calcagno et al., Newsted et al., and Bolotinikov et al. to include the displaying search result of Faybishenko et al., since it is suggested by Faybishenko et al. such that, it would make easy for customer to see the result and make any action which is needed (i.e., "In one embodiment, instead of, or optionally as well as, sending the results to the hub, the provider may send the results directly to a location specified in the query message. For example, the query message may specify a URL that the consumer wishes the results forwarded to or displayed at. As another example, the query message may include an email address or addresses that the consumer wants the results emailed to. "(See Faybishenko et al. Col. 22 lines 40-47)).

Response to Arguments

5. Applicant contents Newsted et al. fails to teach *"a program module configured to parse a grammatical structure of the received inputs to identify a token not present in the received inputs, wherein the token includes a word that is statistically associated with documents that*

have grammatical structures similar to the received inputs; and program module configured to add the token to the received inputs thereby generating a modified inputs". Examiner respectfully disagrees for the reasons stated in the Non-Final Action. Additionally, Newsted et al. teach a method wherein the analysis using parsing techniques to verify the relationship between lexical tokens detected by analysis process. As a result the user input is represented as tokens and in case of any missing lexical token such as a missing semicolon (";") in the programming language statement *(See Newsted et al. Col. 2 lines 3-18).* Also parser would perform grammatical analysis over the lexical token input and upon detection of erroneous token in the user input; one of the valid options would be transmitted in place of the erroneous token. It is obvious that the missing token would be identified by parser *(See Newsted et al. Col. 35-47).*

6. Applicant's arguments for the rest of claims are related to the independent claims 1, 9, 22. Examiner respectfully disagrees with the applicant because of above explanation.

Conclusion

7. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period

will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Fariborz Khoshnoodi whose telephone number is 571-270-1005. The examiner can normally be reached on M-TH every other F 8:00-4:00..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Charles Rones can be reached on 571-272-4085. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

/Fariborz Khoshnoodi/
Examiner
Art Unit 2168

/FK/

/T. M./

Primary Examiner, Art Unit 2165

/Charles Rones/
Supervisory Patent Examiner, Art Unit 2164